



# Programme Darwin Update November 2020

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## Executive Summary

Programme Darwin is a cornerstone of FNDC’s transformational program to grow and develop Councils customer service and reputational standing in local government. It includes enhancement of asset management data and analytics, competency development across the of the supply chain and ultimately greater transparency around asset investment and operational decisions for our constituents. In essence it is a continuous improvement program to improve the efficiency and accuracy of capital and operational investment. The overall programme is summarised by the four workstream and associated value propositions shown in the following diagram.



A core attribute of the program is improved communications and engagement. This update goes some way to advance this for senior leaders and elected members. It summarise the achievement to date, presents the background on the linkages to Councils strategy objectives, summarises the benefit framework, updates the program performance and most importantly details mitigations to the current issues and risks.

The issue highlighted is the continuing threat of conflicted resourcing to develop, populate and enhance the system. Realising the four benefits goals is dependent on the commitment of individuals to capture, validate and expand council asset knowledge and then use this knowledge to improve investment outcomes. Unfortunately, these people are also required to deploy this knowledge across a wide variety of activities, making contribution to the program difficult. To mitigate this issue FNDC has strengthened the management of project resourcing through the establishment of a IAMs Digital Governance Group (iDGG) to oversee the program and resolve resourcing conflicts arising from differing demands on resources. This group made up of senior leadership team members has a mandate to prioritise, augment and/or reduce commitment across the organisation. We have also initiated the engagement of our external suppliers to secure their commitment to data capture and validation as well as user input to optimise the system.

The secondly highlighted item is the risk associated with new and/or improved information and details that the programme implementation and population of data sets will generate. To address this (undefined) risk the iDGG will also oversee and guide the response to this new information. As an example, the LTP renewals program has been developed on the data and knowledge currently held. The expanded condition and dimensional data capture program starting in early 2021 will provide better detail and likely change priorities. Where this change is beyond the ability of the program to accommodate through reprioritisation, the iDGG will provide organisational direction on how these changes should be managed.

In summary Programme Darwin is in a stable position albeit progressing slower than initially planned due to drought response and COVID. Added measures particularly in governance have been put in place to address both the issues and risks identified. As the performance framework notes a communications plan and improved reporting environment will be implemented in the first quarter of 2021 to increase awareness and record performance in a more transparent way.



## 1 Introduction

The purpose of this paper is to update the governing body on the progress of Programme Darwin and outline the risks and issues impacting ongoing delivery. A lot of productive and valuable work has been done in setting up the system which is a credit to the team involved given conflicting demands on time and decisioning from the management of drought and Covid-19 as well as the increasing quality standards necessary for information used to guide FNDC's 2021- 2031 LTP.

This paper builds on the achievements to date including

- Development and approval of an asset management policy,
- Development and approval of the asset hierarchy,
- Installation and customisation of the INFOR (the asset management platform),
- Development of the structured investment framework to support LTP deliberations,
- Data set cleansing,
- Initial data transfers (between FNDC systems),

and provides a concise but comprehensive background for Programme Darwin and finally details a key risk and issue that will require continued attention for the Programme to succeed in the coming years.

## 2 Background

### 2.1 Strategic Alignment

FNDC mission is *Creating Great Places, Supporting Our People.* To activate Council, staff, and stakeholders around this goal a 6-point governance framework has been developed to guide the development of the LTP and culture of Council. Its focus areas are

1. Civic leadership and advocacy (SA1).
2. Addressing affordability (SA2).
3. Better data and information (SA3).
4. Affordable core infrastructure (SA4).
5. Improved Council capabilities and performance (SA5)
6. Empowering communities (SA6)

A common component in enabling achievement of these outcomes is asset management. It provides the evidence, analytics, and operational detail to support long term asset investment and affordable levels of service for how we operate and maintain our assets. It sits alongside other key strategic document e.g. FN2100, the infrastructure strategy as part of a suite of materials that present the knowledge and detail that empower our stakeholders and community to constructively engage on development of their communities.

To succeed however asset management needs accurate data and a robust systems environment to support these decisions on investment, service levels and engagement. Programme Darwin, and its partner transformation programmes provide the basis for developing and improving asset knowledge and performance to realise the above stated goals and mission.

#### 1.1 Programme Darwin Benefit Realisation.

Programme Darwin has been scoped to develop, analyse, and present FNDC's asset management information within a single source, managed and dynamic operating environment. Fundamentally it provides the information infrastructure to capture, store and interrogate the attribute, condition and performance data needed as the basis for all investment and operating activities.



Building off FNDC’s strategic objectives, Programme Darwin has developed a supporting set of program benefits to demonstrate its influence on the corporate goals as well as guide and recognise delivery achievement. The benefit realisation categories defined through consultation with staff, stakeholders, and elected members in are 2019 are as follows alongside their links to the Councils strategic focus areas.

- Accurate, timely and robust system and data to develop infrastructure investment and service optimisation; (SA3)
- Demonstrating value for money in both current and future asset management decisions; (SA2, SA4)
- Improved capabilities and performance to optimise council and data supply chain resourcing; (SA5)
- Industry leading thought leadership and community advocacy in asset management through accessible data and scheme representation: (SA1, SA6)

## 2.2 Programme Darwin Benefits Framework.

Since its inception in October 2019 Programme Darwin has been progressing under four works streams reflecting in part the benefit categories along with the necessary development of the functional requirements and system attributions. The four work streams are:

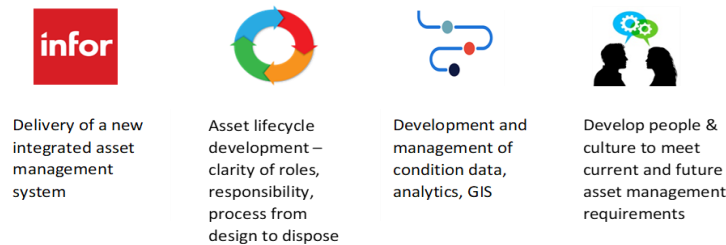


Figure 1 Initial Workstream definition

Following a recent review of these workstreams to ensure alignment with the benefits categories the programme team have opted to refine the core outcome area for each. While the initial workstream around system development remains unchanged the other three have been merged into two and a new customer/stakeholder stream established. This better represents the natural programme cycle and dependencies and lifts the user focus area to a more prominent level. It also aids with improved accountability for each workstream with more direct function alignment of resourcing. The adjusted workstreams are as follows.

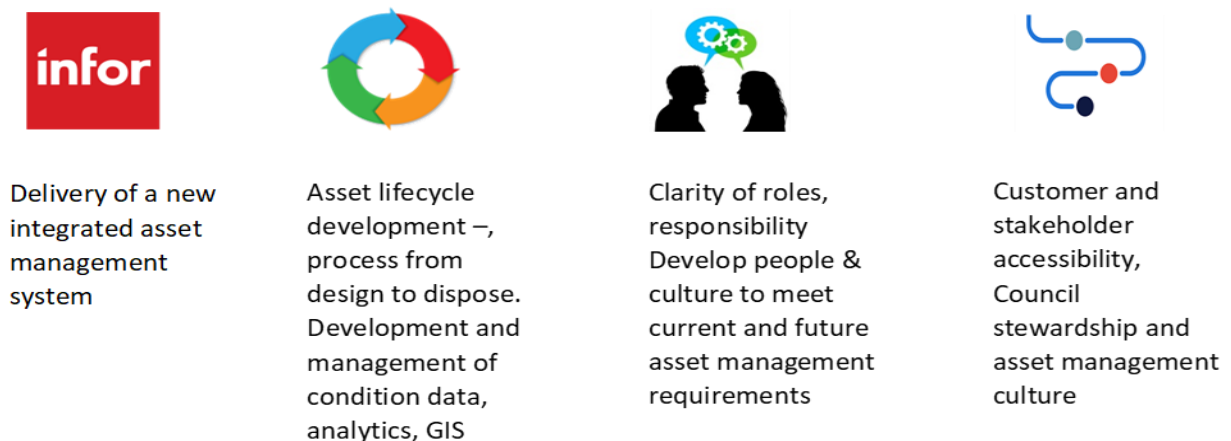




Figure 2 Revised Workstream and benefit definition



### 2.3 Work stream benefits and performance targets


To guide and mandate the continued investment in the program a revamped benefits realisation framework and mapping exercise was undertaken for each workstream. This linked the area of benefit with specific objectives and Key Performance Areas (KRA). These KRA's were then developed to produce Key Performance Indicators (KPI) on which programme achievement and consequently benefit realisation can be measured. It is important to recognise that the current roadmap was developed for Phase one of this program so did not include an ongoing commitment in support of the Living Asset Management Plan (LAMP) and enhancement of the system.


Benefit	Current (Phase 1) Key Performance indicators	Subsequent Phase Key Performance indicators
 <p><b>Accurate, timely and robust system and data to develop infrastructure investment and service optimisation; (SA3)</b></p>	1.1 A configured version (without data links) of INFOR demonstrated for Council Mark assessment in 2020.	1.7 Achieve 95% reliability for IPS/INFOR data sets being used for PMF based reporting.
	1.2 Passing a report from IPS to Techone, a data sync of selected fields from IPS to ARC GIS and Asset management related RFS that need to interact with IPS for selected automated works flows	1.8 Achieve 95% reliability for all data flows between information systems including external suppliers.
	1.3 Operable version of INFOR to support the pilot Lamp by June 30th, 2021 and fully developed system (to initial project specification) by June30th 2022	1.9 Develop and implement a data governance policy and strategy
	1.4 Completed (existing) data cleansing and migration data sets by Dec 2020	
	1.5 Process maps, management controls and documentation reviewed by stakeholders and approved by June 30th 2021	
	1.6 Accurate depreciation and revaluation calculations (to be passed through to the finance system)	

Benefit	Current (Phase 1) Key Performance indicators	Subsequent Phase Key Performance indicators
	2.1 Asset Management Policy in place by Dec 2020	2.5 Complete a criticality and resilience analysis of 3W and DF assets to guide maintenance and investment programs by Dec 2021
	2.2 Condition data acquisition funding approved, and program implemented	2.6 Lifecycle GAP analysis completed by June 30th 2021



<b>Demonstrate value for money in both current and future asset management decisions; (SA2, SA4)</b>	2.3	LTP inputs on Infrastructure investment in capital and operations derived from INFOR as single source input to LTP development (for infrastructure)	2.7	Demonstrate 95% accuracy in the exchange of data between INFOR and network modelling systems
	2.4	Paper to SLT by December 2021 on installed system competency and proposed development pathway for INFOR and the LAMP	2.8	Maintenance Plan showing maintenance activity program and funding (linked to LTP opex) envelope in place for all urban treatment plants and critical structures by June 30th 2022
			2.9	implement data quality improvement plan including independent auditing and augmented data capture plans.
			2.1	Demonstrate an initial set of asset analytics for key asset classes by December 2022

Benefit	Current (Phase 1) Key Performance indicators	Subsequent Phase Key Performance indicators		
 <b>Improved capabilities and performance to optimise council and data supply chain resourcing; (SA5)</b>	3.1	Continuous updating and integration of requirements associated with FNDC's Customer and Digital Transformational Program (CDTP) demonstrated by engagement and actions arising from meetings.	3.5	Service level agreement negotiated and duly authorised by June March 30th 2021
	3.2	Asset management team transformation plan signed off by SLT by March 2021	3.6	Complete a resource succession plan
	3.3	INFOR Training program implemented complete by June 30th 2021		
	3.4	Map and optimise data supply and information utilisation chains by June 30 2020		

Benefit	Current (Phase 1) Key Performance indicators	Subsequent Phase Key Performance indicators		
	4.1	Communication plan in place by March 2020	4.5	ISO 55001 assessment by December 2021
	4.2	Pilot lamp by June 30th, 2021 and fully developed version in place by June 30 2022	4.6	The value and frequency of approved investment program variations is reduced by 10% (each)

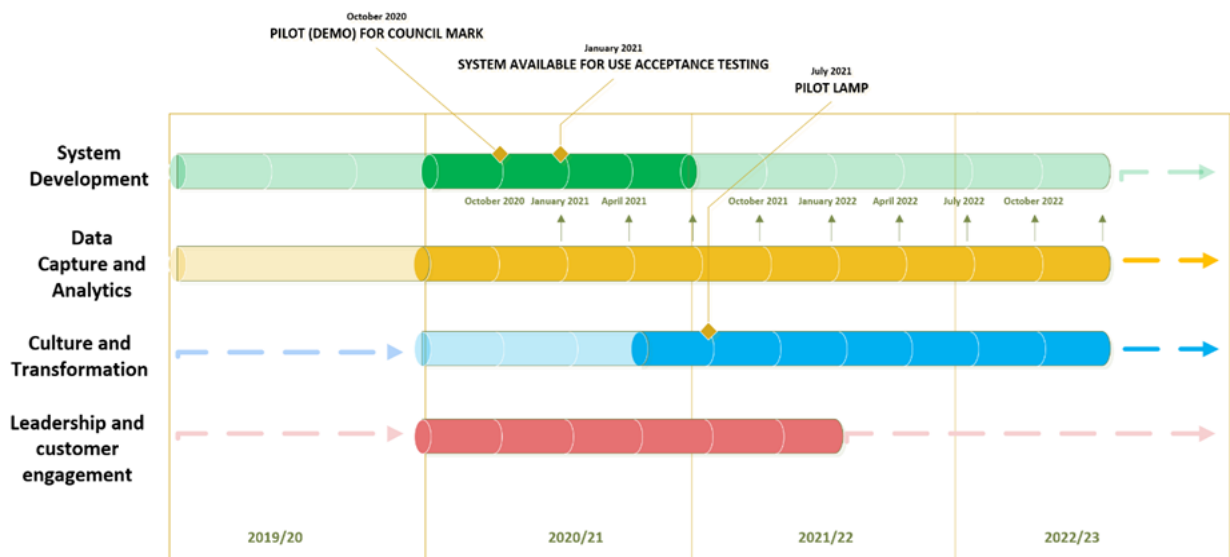


**Industry leading thought leadership and community advocacy in asset management through accessible data and scheme representation: (SA1, SA6)**

- 4.3 Council mark score improvement in 2020
- 4.4 PMF framework and process fully integrated with INFOR

## 2.4 Program

The recent Council Mark PAF included an updated program for the four workstreams, noting that the headings of the four workstreams were abridged from the descriptions shown above. This program supersedes the original in recognition of the impacts of operational demands on the project team arising from FNDC’s drought response (2019/20) and the interruptions to workflow and the data supply program caused by Covid 19.



Programme Darwin Timeline

The key milestones, included in the KPI framework above are a pilot LAMP by June 2021 and a fully operable, but basic system by June 2022. Achievement of these milestones are however dependant on the continued support of risk and issue mitigation outlined later in the report.



## 2.5 Performance

The following table provides a summary a key performance indicator status for Phase 1. As with most RAG status indicators, green is in track, orange is under a managed intervention programme and red is under escalation provisions awaiting programme sponsor and/or executive guidance. An unclassified (blank) status means the task has not yet started.

1.1	A configured version (without data links) of INFOR demonstrated for Council Mark assessment in 2020.	Green
1.2	Passing a report from IPS to Techone, a data sync of selected fields form IPS to ARC GIS and Asset management related RFS that need to interact with IPS for selected automated works flows	Green
1.3	Operable version of INFOR to support the pilot Lamp by June 30th, 2021 and fully developed system (to initial project specification) by June30th 2022	Green
1.4	Completed (existing) data cleansing and migration data sets by Dec 2020	Green
1.5	Process maps, management controls and documentation reviewed by stakeholders and approved by June 30th 2021	Green
1.6	Accurate depreciation and revaluation calculations (to be passed through to the finance system)	Green
2.1	Asset Management Policy in place by Dec 2020	Green
2.2	Condition data acquisition funding approved, and program implemented	Yellow
2.3	LTP inputs on Infrastructure investment in capital and operations derived from INFOR as single source input to LTP development (for infrastructure)	Yellow
2.4	Paper to SLT by December 2021 on installed system competency and proposed development pathway for INFOR and the LAMP	White
3.1	Continuous updating and integration of requirements associated with FNDC's Customer and Digital Transformational Program (CDTP) demonstrated by engagement and actions arising from meetings.	Green
3.2	Asset management team transformation plan signed off by SLT by March 2021	Yellow
3.3	INFOR Training program implemented complete by June 30th 2021	White
3.4	Map and optimise data supply and information utilisation chains by June 30 2020	White
4.1	Communication plan in place by March 2020	Yellow
4.2	Pilot lamp by June 30th, 2021 and fully developed version in place by June 30 2022	Green
4.3	Council mark score improvement in 2020	Green
4.4	PMF framework and process fully integrated with INFOR	White





### 3 Risks and Issues

There is fundamentally one key risk and one key issue that impact the achievement goals of Programme Darwin. The immediate issue is conflicting resources demands impacting target date achievement. The risk is the consequential impacts a more accurate data and improved analysis. Whilst the former can be and is being mitigated through managed application of resources (and budget) the latter is somewhat more challenging to resolve given it is about FNDC's response to a future undefined state.

#### 3.1 Resourcing

Programme Darwin as much about intellectual knowledge as it is the technology. Having an asset management system, INFOR/IPS in this case, provides the tools to store data and process information but it is knowledgeable and competent people that will bring Programme Darwin to life and grow the councils standing.

The challenge for FNDC is that the staff necessary to contribute to the program, both internal and external, have multiple demands on their time. Increasing expectation and management of the Mandatory, Renewals and Strategic activities (as outlined in the 2021-31 LTP) are significant influences on staff prioritisation and the Tactical (unplanned) demands bring disruption and distraction to an already oversubscribed asset team

The good news however that this risk has already been identified and mitigated with approval for two additional asset management staff and resource base and initiation if an active engagement with suppliers around optimisation of resource needs. The new staff in the assets team will focus on analytics, supply chain management and customer interface allowing core asset managers more time to develop and refine the data and system necessary for Programme Darwin.

During the development of the system workstream there has been excellent support from IT and other departments of Council. This support has however been greater than initially intended and potentially drawn resource off other council initiatives over the past 18 months. There is however a positive willingness to continue supporting the program, but this commitment will be moderated across other organisational demands. IAMs are establishing a digital governance framework to assist in the prioritisation and commitment to Programme Darwin along with other digital initiatives.

To develop joint ownership around data supply and information development/consumption a new data supply chain group is being set up which will eventually include all data suppliers and key internal partners. The initial phase includes Far North Waters (FNW) and Recreational Services (Rec) and has established the governance framework and preliminary program around data capture and integration. This group will also tie in the condition capture program once a supplier is committed.

Overall, there are several positive mitigations in place to reduce the issue of delay from resourcing for data and system development support. With the establishment of the IAMs digital governance group this risk can be continually monitored and mitigated under an organisational umbrella to ensure the performance goals are being continually monitored and the program benefits realised.

#### 3.2 Enterprise Asset Management (EAM) Evolution.

As with any digital system advancement program implementing FNDC's EAM comes with some risk. In essence; we do not know what we do not know. The existing asset data (both documented and intuitive) is probably around 80% reliable (unsubstantiated estimate) so while it is credible enough to support development of the LTP and annual program envelope is isn't as robust as we would like to optimise individual asset decisions based upon remaining life or develop a predictability framework to refine key investment decisions. In addition while we have general confidence in an overall envelope for renewals refined asset knowledge particularly around condition and dimension (size, location etc) is needed to reduce



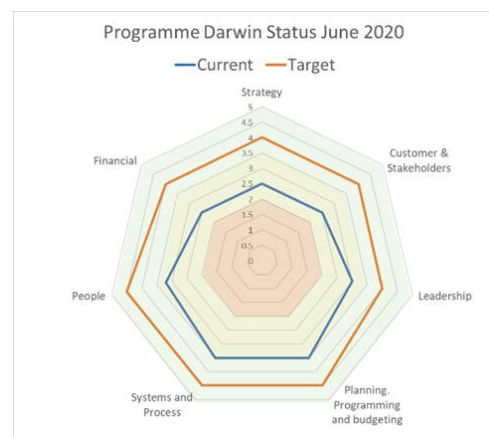
the frequency and impact of unplanned (tactical) investment and align better with the fiscal and fixed asset financial environment. In other words, developing a more productive and efficient investment environment across Council.

Programme Darwin’s second workstream (data and analytics) has been developed to obtain, rationalise, and validate data from a wide pool of source documents and systems. These include the existing asset data sets, operational knowledge held by suppliers and individuals, corporate data (e.g. valuations) and many other potential repositories. IAMs are currently finalising a procurement to source a set of suppliers to undertake a range of additional condition and dimensional data capture activities. This work will be managed by a lead agency that will liaise with FNDC asset staff on program outcomes and variations as well as implement were practical social procurement outcomes in training and competence development. This program will be managed by the programme manager and reported to the Digital Governance group.

As noted above new and updated data generates the potential for unforeseen and potentially contradictory information. The establishment of the Digital governance group is also designed to provide the guidance on how this information is applied to Councils planning and investment programmes over the years to come. This governance environment along with the continual exposure of programme results and achievements to senior leadership and elected members is seen as the best mitigation and/or control of the uncertainty risk of ‘what we don’t know’.

## 4 Next steps

A programme appraisal earlier this year based loosely on an ISO55001 maturity assessment identified and acceptable framework and achievement but a need to do better. The internal assessment (by the Programme) Manager scored a selection of common attributes, representing the necessary programme perspectives were assessed via a maturity scale that scores each attribute in the range 0 (innocent) to 5 (excellent). As the adjacent graphic demonstrates while the key attribute scored in the acceptable range more work is needed to lift each into the mature and/or advanced range.





In response to this ‘gap analysis’ several tasks were identified (at the project level) to support the programme’s KPI’s outlined above. These are listed on the following table and are ongoing.

	Transparency	Customer (Service Excellence)	Stewardship	Agility	Sustainability	Empowerment
User Requirements Update	✓	✓				
Benefit Realisation Update	✓					
Data Management Strategy	✓				✓	
Program Review	✓			✓		
Communications strategy and plan		✓				
Customer service strategy and plan	✓	✓				
Individual performance targets			✓		✓	
Activity Plan update and reprioritisation	✓		✓	✓		
Systems and process maps	✓				✓	
Project Feasibility reporting						✓
Budget Review						✓

## 5 Summary and Recommendation

Whilst Programme Darwin has been impacted by the various demands on resourcing and system development it remains on track to demonstrate its potential by June 2021 and have a functional system operational by June 2022. The key performance indicators continue to support this achievement albeit with some areas requiring more attention than others. The focus for the programme team is on data capture, transformation, and customer outcomes.

There is a continued issue with resourcing in support of the programme but sufficient mitigation has now been put in place to minimise potential disruption to the current program and benefit realisation.

As we don’t yet have a clean and fully validated data to populate the system there remains a risk that existing asset management outputs e.g. renewals program, fixed asset register alignment are at best 80% aligned. New and validated information may change the fiscal envelope of the LTP as we optimise deterioration profiles and integrate system data.